



Ercros



Monzón factory

Key data. Year 2022

1989
Foundation

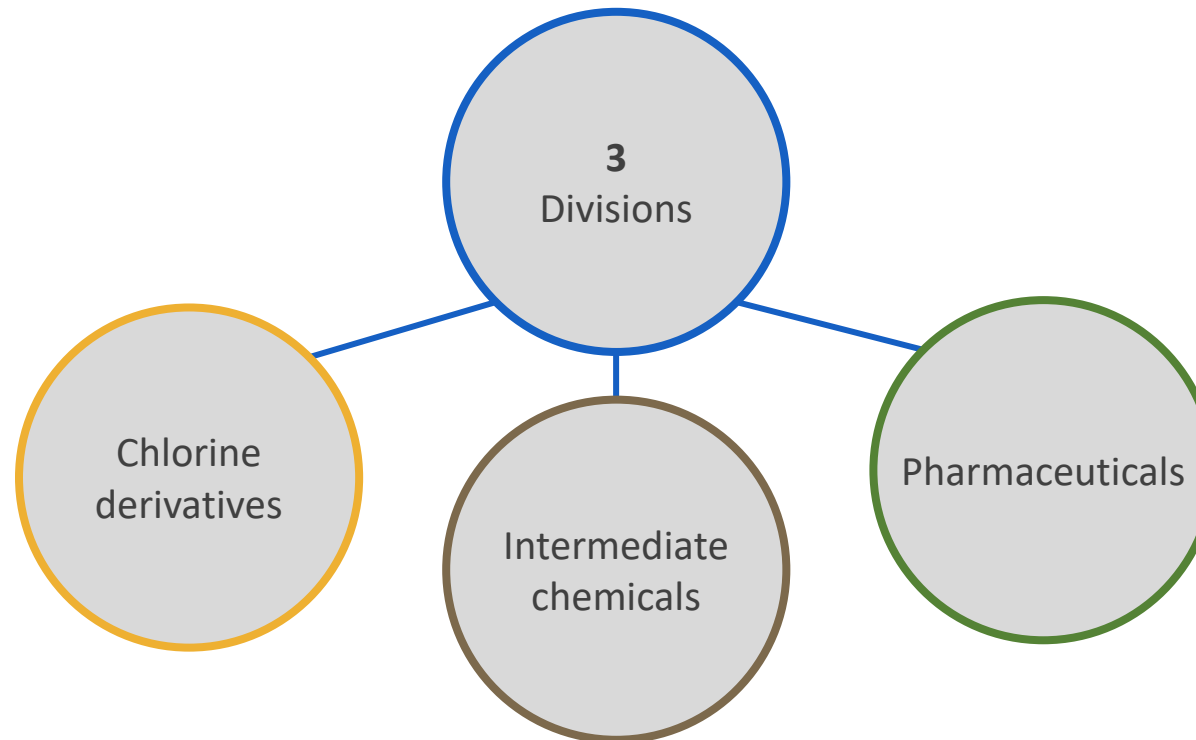
1,348
Workforce

10
Factories

998 M€
Sales

47 %
Export (>90
countries)

143 M€
Adjusted
ebitda



Factories



Chlorine derivatives

Intermediate chemicals

Pharmaceuticals

Key data from the Monzón factory. Year 2022

- The Monzón factory is dedicated to the research, marketing and production of technologically advanced polymers (PVC compounds) and environmentally (bioplastics).

1952

Foundation year

32

Workforce

32,800 t/year

Production
capacity

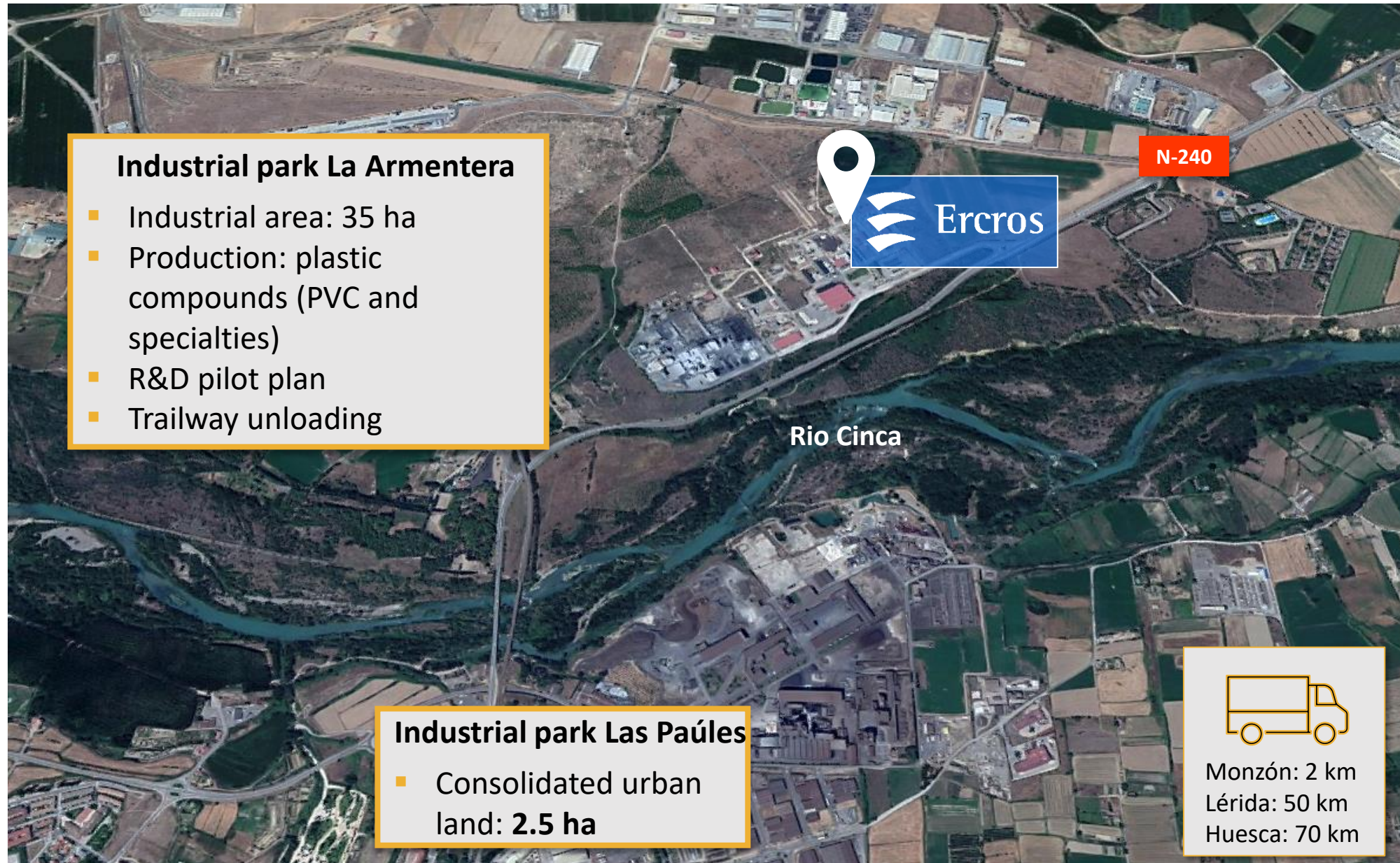
26 M€

sales

10%

Export

Industrial parks La Armentera and Las Paúles



A little history

1952

Beginning of the activity in Las Paúles

1955

Start of PVC production

1960

Start of activity in La Armentera

1981

New PVC composites plant

2003

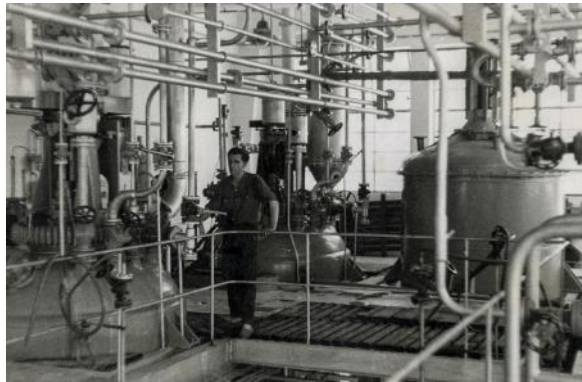
New pilot plant

2020

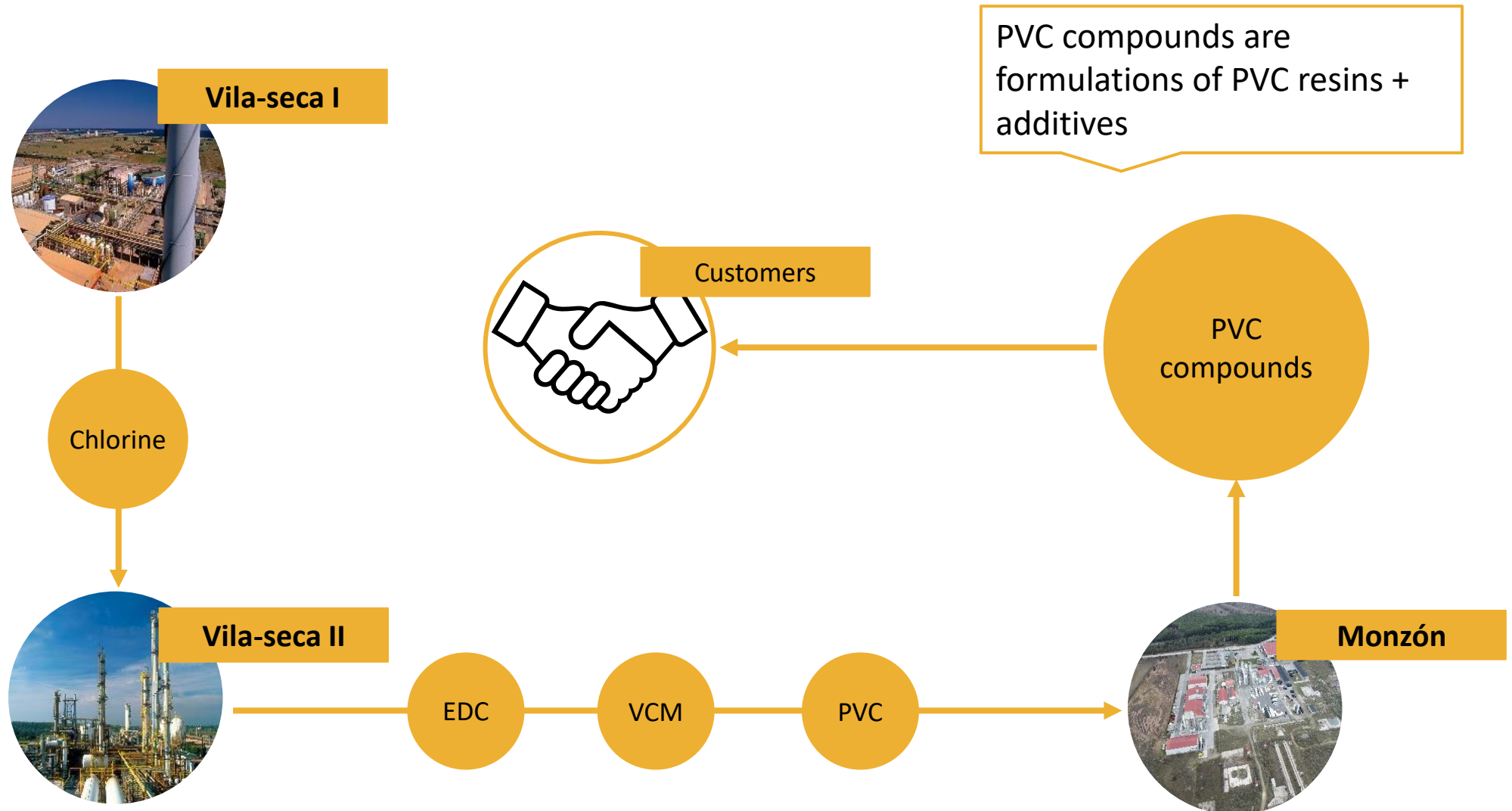
New PVC compounds extrusion line

2022




New bioplastics extrusion line






Integration of the Monzón factory in Ercros



Types of PVC compounds (1/2)

| | | |
|--------------------------------|---|--|
| Extrusion-blow moulding | Applications <ul style="list-style-type: none">■ Medical drains■ Boats■ Candles |  |
| Film extrusion |  | Applications <ul style="list-style-type: none">■ Flexible film■ Rigid film (blister) |
| Rigid extrusion | Applications <ul style="list-style-type: none">■ Windows■ Panels■ Blinds■ Tubes |  |

Types of PVC compounds(2/2)

| | | |
|------------------------------|---|--|
| Rigid injection |  | Applications <ul style="list-style-type: none">■ Pipe parts■ Electrical boxes■ Tacos■ Bases and supports |
| Plasticized injection | Applications <ul style="list-style-type: none">■ Plugs■ Road cones■ Footwear■ Oxygen masks■ Food |  |
| Plasticized extrusion |  | Applications <ul style="list-style-type: none">■ Profiles■ Cables■ Hoses■ Construction tubes■ Medical tubes |

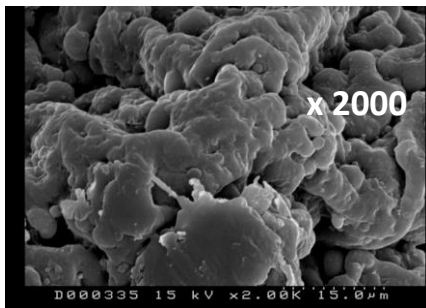
R+D: PVC resins and PVC compounds

PVC resins

- Optimization of current polymerization processes.
- Development of new resins.
- Analysis and characterization of resins on the market.
- Homologation of raw materials.
- New polymerization processes.

PVC compounds

- Optimization of current formulations.
- Valuation of raw materials.
- Adjustment of formulations.
- Analysis and characterization of market compounds.
- Development of new compounds.



- ErcrosBio, the truly "bio" bioplastic, for its origin and for its end.

ErcrosBio L

- Suitable for 3D printing.
- Of natural origin.
- Compostable industrial.
- Recyclable.
- Very low CO₂ footprint.
- Suitable for packaging production.
- Withstands high temperatures.

ErcrosBio PH

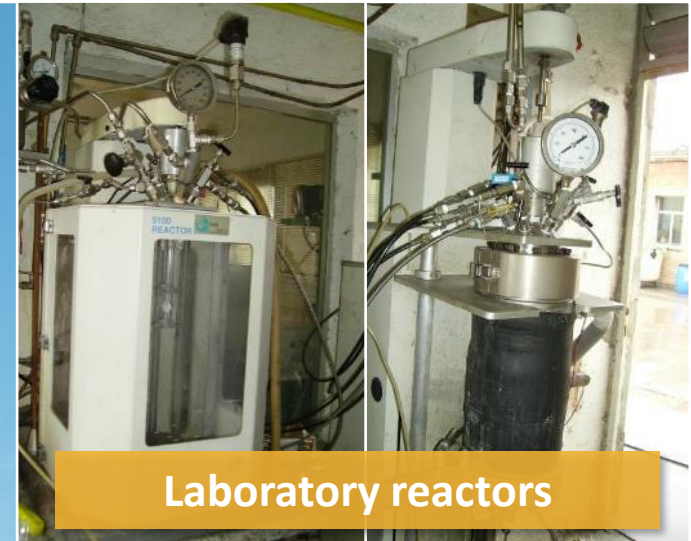
- Biodegradable in water.
- Of natural origin.
- Domestic compostable.
- Recyclable.
- Very low CO₂ footprint.
- Very versatile.



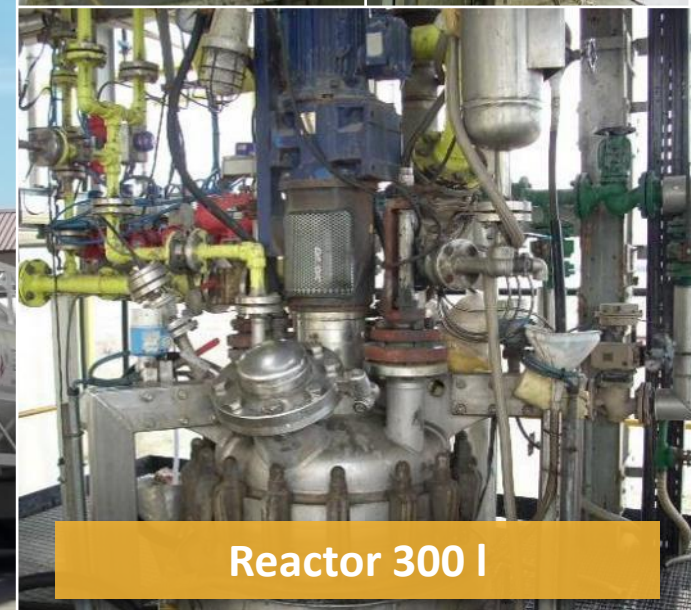
R+D equipment



Pilot plant



Laboratory reactors



Reactor 300 l

Laboratory equipment

- **Universal testing machine:** tensile properties.
- **ATR-FTIR:** infrared spectroscopy.
- **Spectrophotometer:** color parameters L^* , a^* , b^* .
- **Göttfer rheometer:** rheological properties
- **Werner-Matthis stove:** static thermal stability.
- **Stoves:** aging and compostability tests.
- **Izod:** impact properties.
- **DSC:** differential scanning calorimetry.
- **Vicat:** softening temperature.
- **Xenotest:** aging sunlight
- **Aurburg injector:** sample injection
- **Labtech extruder:** obtaining PVC pellets, bioplastics, etc. Lateral feeding of liquids and solids.
- **Flag extruder:** obtaining profile from pellets.
- **Brabender extruder:** obtaining processing parameters.
- **Brabender:** dynamic thermal stability, melting tests, plasticizer absorption.
- **MFI:** flow meter.



ESG accreditations

- Prevention management system according to **ISO 45001**.
- Quality management system according to **ISO 9001**.
- Environmental management system according to **ISO 14001**.
- Verification of greenhouse gas (GHG) emissions according to **ISO 14064**.
- Registration in the European Eco-Management and Eco-audit Register, **EMAS**.
- Seal of Social Responsibility of Aragon, **RSA**.



Programs and ratings

- **Responsible Care:** Program of good practices in sustainability of the global chemical sector.
- **Global Compact:** Program promoted by the UN that contains 10 principles of action.
- **EcoVadis:** International Sustainability Classification (score of 84/100 in 2022).
- **Vinyl Plus:** Commitment of the European PVC industry to develop greener ways of producing, using and recycling this product.
- **ECVM Charter:** Sustainable practices program of European PVC manufacturers.
- **Operation Clean Sweep:** EU program to prevent the loss of microplastics at sea.



Compliance with the sustainable development goals (SDGs)

In the development of its activity, Ercros contributes to the fulfillment of the 17 SDGs established in the UN 2030 Agenda, although it has a special impact on:

- **SDG 3:** Good health and well being.
- **SDG 6:** Clean water and sanitation.
- **SDG 7:** Affordable and clean energy.
- **SDG 8:** Decent work and economic growth.
- **SDG 9:** Industry, innovation and infrastructures.
- **SDG 12:** Responsible consumption and production.
- **SDG 13:** Climate action.



Partnerships and collaborations



Thank you

For more information

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